## DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-010062 Address: 333 Burma Road **Date Inspected:** 11-Nov-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Liu Fawen **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** OBG & TOWER Components

**Summary of Items Observed:** 

On this date Caltrans OSM Quality Assurance (QA) Inspector, Sandeep Kumar was present during the times noted above for observations relative to the work being performed.

# BAY 1

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint # 127 located on Counter Weight CW002 – PP096. Welder is identified as 059450. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2233.

# BAY 2

The following NDT inspection carried out as per the ZPMC submitted Notification No. 004599 Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

- 1. FB3024 001 019; 026; 042; 023; 059; 064
- 2. FB3047 001 009; 038; 043; 060; 022; 070
- 3. FB3025 001 016; 029; 050; 019; 033; 052

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

- 4. FB3097 001 025; 034; 042; 065; 016; 030
- 5. FB3020 001 042; 027
- 6. FB3012 001 012; 028; 038; 014; 039; 047
- 7. FB3021 001 014; 034; 041; 023; 030; 058

The following NDT inspection carried out as per the ZPMC submitted Notification No. 004603 Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

- 1. FB3022 001 016; 029; 059; 019; 025; 033; 037; 042; 064
- 2.  $FB3080 001 009 \sim 014$ ; 039
- 3. FB3046 001 007; 026; 037; 056; 009; 041; 030; 064; 068; 085

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint # 029 located on FB3003 – 001. Welder is identified as 045203. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T -2132-3.

FCAW process welding of weld joint # 021 located on FB3059 – 003. Welder is identified as 045227. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T -2233 - B - U2 - F.

FCAW process welding of weld joint # 082 located on FB3031 – 001. Welder is identified as 062438. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T -2133.

BAY 5

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint # 009 located on Traveler Rail 10TR3 – 031. Welder is identified as 205390. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132.

FCAW process welding of weld joint # 010 located on Traveler Rail 10TR3 – 024. Welder is identified as 204342. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2232 - Tc - U5 - F.

FCAW process welding of weld joint # 012 located on Traveler Rail 11TR3 – 024. Welder is identified as 215078. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132.

FCAW process welding of weld joint # 014 located on Traveler Rail 10TR3 – 025. Welder is identified as 204342. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

the WPS -B - T - 2232 - Tc - U5 - F.

BAY 6

The following NDT inspection carried out as per the ZPMC submitted Notification No. 004607 Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

- 1. EP3004 001 022  $\sim$  025 Green Tag # 10616
- 2. DP3034 017 001 ~ 004 Green Tag # 10612
- 3. EP3010 001 004 Green Tag # 10379

Tower

This QA Inspector observed the following work in progress:

SMAW process repair welding of weld joint #10B located on Tower Strut WD1 – A305 – 77M – 1. Welder is identified as 048659. ZPMC QC is identified as Sun Zi Wang. The welding variables recorded by QC appeared to comply with the WPS – 345 – SMAW – 2G (2F) – FCM – Repair.

SMAW process repair welding of weld joint #10B located on Tower Strut WD1 – A305 – 77M – 2. Welder is identified as 054467. ZPMC QC is identified as Sun Zi Wang. The welding variables recorded by QC appeared to comply with the WPS – 345 – SMAW – 2G (2F) – FCM – Repair.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

#### **Summary of Conversations:**

No Relevant Conversations.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer